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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/520,405	03/08/2000	Michael G. Martinek	307.029US1/PA0390	1300

7590 09/03/2004

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EXAMINER
ASHBURN, STEVEN L

ART UNIT	PAPER NUMBER
3714	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _7 June 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-10 and 13-21_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-10 and 13-21_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 7, 2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1-3, 7, 13, 15-17, 19 and 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Mathur et al., US 6,671,745 B1 (Dec. 30, 2003).

Claims 1, 16 and 17.

a.   A computerized controller having a processor, memory, and a nonvolatile storage. *See fig. 2.*

b.   A operating system kernel that executes a system handler application, the system handler application operable to dynamically link with at a plurality of gaming program shared objects and load said program shared objects. *See fig. 2, 3; col. 4:7-12; 6:28-65., 9:48-10:24.*

c.   A system handler application having an Application Program Interface (API) having

functions callable from the program shared object, the API having a plurality of functions

callable by and used by at least some of the shared objects. *See id.*

d.   System handler application operable to initiate an program based on data variables stored

in the nonvolatile storage the system handler application operable to write data variables to state

storage and nonvolatile storage. *See 5:1-26, 8:36-65.*

e.   Operating system controlled by a general-purpose computer. *See col. 4:22-30.*

f.   Nonvolatile storage stores program variables, such that loss of power does not result in

loss of the state of the computerized system. *See 5:1-26, 8:36-65.*

g.   A system handler application that loads a first shared object and the first shared object

calls up a function from within an API. *See fig. 2, 3; col. 10:13-31.*

"Game" and "wagering game" software is functionally indistinguishable from other types of

software. Thus the terms "game" and "wagering game" are merely suggestive of the system's intended

use. A processor executing a wagering game performs the equivalent function in the same manner as to

the specialized industrial controllers, personal computers, hand-held computers or embedded systems

described by Mathur at column 4, lines 15-30. These devices are capable of executing "game" software

for a "wagering game".

Claim 2. A system handler application comprising an event handler which handles events. *See

col. 8:62-65.*

Claim 3. A system handler unloading, loading and executing program shared objects. *See col.

7:56-8:15..*

Claim 7. A IBM PC-compatible computer. *See col. 4:15-30.*

Claims 13 and 19. Executing an operating system which then loads and operates the system handler application, the system handler application operable to dynamical link with a plurality of program shared objects and load said shared objects the system handler application having an API having a plurality of functions callable from at least some of the shared objects; the system handler application operable to initiate an software application based on data variables stored in a nonvolatile storage and the system handler application operable to write data variables to the nonvolatile storage; the system handler application then loading a first shared object and providing an API functions called by the first shared object, the system handler application then executing the first shared object. *See, e.g., fig. 2, 3; col. 2:56-3:36; 6:28-65, 8:35-65, 10:17-24.*

"Game" and "wagering game" software is functionally indistinguishable from other types of software. Thus the terms "game" and "wagering game" are merely suggestive of the system's intended use. A processor executing a wagering game performs the equivalent function in the same manner as to the specialized industrial controllers, personal computers, hand-held computers or embedded systems described by Mathur at column 4, lines 15-30. These devices are capable of executing "game" software for a "wagering game".

Claims 15 and 21. A system handler application comprising an event handler which handles events. *See col. 8:62-65.*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathur in view of Brunner et al., US 4,727,544 (Feb. 23, 1988).

Claim 4. Mathur discloses a system handler that stores data variables modified by program shared objects in non-volatile storage and state storage to ensure data is not lost during a critical failure such as a power loss. *See col. 8:15-46.* Mathur does not describe, verifying the code for a shared object has not changed. Regardless, this feature would have been obvious to a gaming artisan at the time of the invention. Gaming regulations require that controllers include mechanisms to verify executable code and data which may affect payouts or game outcomes. Brunner, for example, teaches that known gaming devices include memory checking software which is implemented when a device is powered-up to detect unauthorized memory changes. *See col. 1:13-32.* The level (e.g. kernal, operating system or application) at which such software is implemented is within purview of the designer. Thus, it would have been obvious to a gaming artisan at the time of the invention to modify the special purpose controller disclosed by Mathur, wherein the system handler executes a program to store application and state data to prevent loss after a power failure, to add the feature of verifying this code for shared objects has not changed in order to meet gaming regulations which require that controllers include mechanisms to verify executable code and data which may affect payouts or game outcomes.

Claim 5. Mathur discloses a index of pointers that associate variable names with data locations. *See col. 7:4-9.* Data may stored in non-volatile memory. *See col. 5:1-41, 8:36-46.*

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathur in view of Brunner, as applied to claim 4 above, in further view of Pascal, US 5,791,851 (Oct. 26, 1999).

The combination of Mathur with Brunner describes all the features of the claim except causing the execution of a corresponding callback function when a data variable is changed in non-volatile storage. Regardless of the deficiency, this feature would have been obvious to an artisan at the time of invention in view of Pascal.

Pascal discloses an analogous operating system for a gaming device wherein callbacks are employed to communicate information between application modules upon the occurrence of certain events. *See 1:44-2:30.* In generally, callback routines are used in state-based machines to communicate data between independent modules upon the occurrence of predetermined events. *See col. 6:25-45.* Pascal describes using callback to enhance to robustness of a gaming device under fault conditions to protect data that may affect the outcome of a game payout. *See col. 2:25-30.*

In view of Pascal, it would have been obvious to an artisan at the time of the invention to modify the customized gaming operating system suggested by the combination of Mathur with Brunner, wherein the system enhance security by monitoring application modules, to execute a callback function corresponding to a change in game data stored in non-volatile memory to enhance the security of the gaming device by monitoring changes in data that might affect the outcome of the game payout and thereby provide a more secure gaming device that is resistant to errors caused by losses in power or tampering.

Claims 8-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathur

Claim 8. Mathur discloses an operating system, but it is not LINUX. Nonetheless, LINUX is a notoriously well-know, commercially available operating system substitutable for the same purpose as the operating system describe by Mathur. Thus, by official notice, it would have been obvious to an artisan at

the time of the invention to modify the controller disclosed by Mathur to substitute the LINIX operating system.

Claims 9 and 10. Mathur discloses shared objects including device handlers wherein at least one device handler for a device is disabled. *See col. 3:5-22, 9:48-10:49.*

Claim 18. Mathur discloses a system handler application which loads and executes shared objects wherein the shared objects are operable to share data via program variables stored in non-volatile storage. *See fig. 2, 3; col. 5:1-41.* Mathur does not state that only one shared object is executed at a time. Regardless, Mathur describes different application require different number of shared objects. *See col. 2:18-49.* It would have been an obvious design choice for an artisan at the time of the invention to modify the controller disclosed by Mathur, wherein the controller maybe modified for specialized, single-purpose devices, to execute only shared object at a time in a system employing large objects that require the controller's full resources.

Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathur in view of Pascal.

Mathur describes all the features of the claim except causing the execution of a corresponding callback function when a data variable is changed in non-volatile storage. Regardless of the deficiency, this feature would have been obvious to an artisan at the time of invention in view of Pascal.

Pascal discloses an analogous operating system for a gaming device wherein callbacks are employed to communicate information between application modules upon the occurrence of certain events. *See 1:44-2:30.* In generally, callback routines are used in state-based machines to communicate data between independent modules upon the occurrence of predetermined events. *See col. 6:25-45.*

Pascal describes using callback to enhance to robustness of a gaming device under fault conditions to protect data that may affect the outcome of a game payout. *See col. 2:25-30.*

In view of Pascal, it would have been obvious to an artisan at the time of the invention to modify the controller described by Mathur to execute a callback function corresponding to a change in game data stored in non-volatile memory to enhance the security of the gaming device by monitoring changes in data that might affect the outcome of the game payout and thereby provide a secure gaming device that is resistant to errors caused by losses in power or tampering.
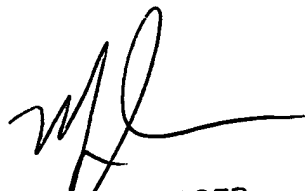
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Ashburn whose telephone number is 703 305 3543. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

s.a.

MARK SAGER
PRIMARY EXAMINER